CLAIMS

1. A radiofrequency receiver comprising:

- radiowave receiving means which convert an electromagnetic wave into a first signal,

- a first mixer which converts the first signal into a second signal by a fixed frequency transposition,

- a filtering means which converts the second signal into a third signal by selecting part of the spectrum of the said second signal,

- a second mixer which converts the third signal into a fourth signal by frequency transposition by means of a transposition signal coming from a frequency synthesizer,

wherein the filtering means comprise at least two band-pass filters of split bandwidths provided with switching means which make it possible to select only one of the filters.

2. The receiver according to Claim 1, wherein the two filters have passbands of the same width.

3. The receiver according to Claim 2, wherein the frequency synthesizer delivers a signal whose frequency varies within a frequency range of the same width as the bandwidths of the two filters.

4. The receiver according to Claim 3, wherein the frequency range is centred between the two passbands.

5. The receiver according to Claim 1, characterized in that the filtering means comprise three filters provided with switching means which make it possible to select only one of the filters, two filters having the same bandwidth, the third filter having a bandwidth twice as broad, and in that the frequency synthesizer delivers a signal whose frequency varies within a first frequency range, the width of which corresponds to the bandwidth of the two filters having the same bandwidth and within a second range which corresponds to twice the first range.

6. A radiofrequency transmitter comprising:

- a first mixer which converts a first signal into a second signal by frequency transposition by means of a transposition signal coming from a frequency synthesizer,

- a filtering means which converts the second signal into a third signal by selecting part of the spectrum of the said second signal,

- a second mixer which converts the third signal into a fourth signal by a fixed frequency transposition,

- radiowave transmission means which convert the fourth signal into an electromagnetic wave,

wherein the filtering means comprises at least two band-pass filters of split bandwidths provided with switching means which make it possible to select only one of the filters.

7. The transmitter according to Claim 6, wherein the two filters have passbands of the same width.

8. The transmitter according to Claim 7, wherein the frequency synthesizer delivers a signal whose frequency varies within a frequency range of the same width as the bandwidths of the two filters.

9. The transmitter according to Claim 8, wherein the frequency range is centred between the two passbands.

10. The transmitter according to Claim 6, wherein the filtering means comprise three filters provided with switching means which make it possible to select only one of the filters, two filters having the same bandwidth, the third filter having a bandwidth twice as broad and in that the frequency synthesizer delivers a signal whose frequency varies within a first frequency range, the width of which corresponds to the bandwidth of the two filters having the same bandwidth, and within a second range which corresponds to twice the first range.

11. Transmission device that comprises a receiver according to Claim 1 and a transmitter according to Claim 6.